

engineered solutions

Medical Equipment

Engineered Solutions for Medical Applications



SOLUTIONS FOR MEDICAL EQUIPMENT



SOLENOIDS

Our solenoids provide high efficiency, high power density, low noise and long life in your medical equipment. Each solenoid is engineered to your exact needs enabling complete control of your system design.



VALVES

Our solenoid valves for medical equipment enable complete control of flow and perform critical safety functions such as flow stoppage when bubbles are detected in treatments like apheresis, protecting patient lives.



MOTOR COMPONENTS

Our team at Tico has decades of experience manufacturing rotors, stators, complete motor assemblies, and more for a variety of precision motion applications such as surgical robotics. Our engineers work collaboratively with you to deliver solutions that meet your exact application requirements. Typical applications include:

- Ventilators & Respirators
- Anesthesia Equipment
- Infusion Therapy
- Dialysis Equipment
- Surgical Power Tools
- Surgical Robotics
- Surgical Tables
- Imaging Equipment

CAPABILITIES



From design to delivery: we do it all.

We strive for innovation and differentiation that allows you to have a competitive advantage so we've invested substantially in our equipment, facilities and training. This enables us to maintain complete control of the products we make for you. We have an extremely robust range of capabilities including:

DESIGN & ANALYSIS 3D CAD design capability. Element (including finite) analysis in vibration, shock, temperature, magnetic, flow, heat transfer, and stress.

R&D LABORATORY Electrical characteristics, operational performance including pneumatic and hydraulic pressure/ flow stands, response time, life cycling, evaluation of new processes, features, and new product development.

NDT TESTING & MATERIAL ANALYSIS Non-Destructive Testing services that includes x-ray, visual, and Dye Penetrant inspection.

ENVIRONMENTAL TESTING Including, but not limited to shock, vibration, salt spray, humidity, high (1000°F) and low (-150°F) temps, altitude to 100,000 feet, and other testing as required.

HYDRAULIC TESTING Up to 75HP, 60,000 PSI

PACKAGING Commercial, military, environmental storage, custom, VPCI, and returnable packaging and cleaning.

MANUFACTURING ENGINEERING In-house Tool/ Machine design and build capabilities.

CNC WINDING MACHINES, COMPUTER AUTOMATED

TEST STANDS Reduces manual testing time and cost and eliminates operator error.

CNC MACHINES Multi-axis, vertical and horizontal turning and milling as well as automatic manufacturing cells.

SCREW MACHINES Six spindle, eight spindle chucking and bar.

WELDING/BRAZING Electron beam, gas tungsten arc welding, laser, induction, heliarc, spot welding, and brazing.

PLATING Cadmium, zinc, electroless nickel, zinc phosphate, chemical film on aluminum, anodize, passivate, Zinc Nickel and others.

PRESSURE MOLDING Transfer and injection coil overmolding.

INTERNATIONAL STANDARDS Meets or exceeds many international certification standards.







